#2000 - Association study of GSTM1, GSTT1 and GSTP1 gene polymorphisms with nephropathy in diabetes type Π Iranian patients	
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Body	Introduction: Diabetes is a multifactorial disease. It is the fourth leading cause of death in many advanced countries.Diabetic nephropathy is the most common cause of end stage renal failureand also is one of common complications of diabetes. when the symptoms appear, the kidneys are already damaged. The research has shown that Genetics is involved in incidence of nephropathy. The main goal of this research is association study of GSTM1, GSTT1 and GSTP1 gene polymorphisms with nephropathy in diabetes type 2 Iranian patients. Method and Materials: In this research, 210 samples are studied. Beta globin is the internal control gene which is used in this study. Multiplex PCR and RFLP are the used method for GSTT1, GSTM1 and GSTP1 genes respectively. The restriction Enzyme which is used for RFLP is Alw261 in this study. Agarose Gel 1.5%is used for Multiplex PCR and 3% for RFLP after treatment of restriction enzyme. Samples are categorized in 4 groups: Diabetic, Diabetic Nephropathy, Nephropathy and Controls K Square method is used to analyze statistic data. Result: our results show no meaningful relation between each GSTT1, GSTM1 and GSTP1 genes variants and increased risk of Diabetes, nephropathic diabetes and kidney disorders. This happens while diabetic patients who has GSTP1(Ile/Ile)/GSTT1(+)/GSTM1(-) genotypes are under the risk of kidney disorders. Conclusion: the outcome of this study reveals this fact that

combination polymorphism of these 3 genes in the form of ((GSTP1(Ile/Ile)/GSTT1(+)/GSTM1(-))) is related to diabetic nephropathy disease and its recognition has great impact on managing this disease.

Key Words: Type 2 Diabetes, Diabetic Nephropathy, Multiplex PCR, RFLP-PCR, Association

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